AD NUMBER

ADB971411

CLASSIFICATION CHANGES

TO: **unclassified**

FROM: **restricted**

LIMITATION CHANGES

TO:

Approved for public release, distribution unlimited

FROM:

Distribution: DTIC users only.

AUTHORITY

E.O. 10501, 5 Nov 1953; AFMC ltr, 19 Feb 2002

AIR PROVING GROUND

EGLIN AIR FORCE BASE, FLORIDA

TEST CONDUCTED BY
EGLIN AIR FORCE BASE, FLORIDA

SUBJECT

OPERATIONAL SUITABILITY TEST OF OPEN GUN PORTS FOR F-86 AIRCRAFT

PROJECT NO

24913 - - - 5

DATE

31 AUGUST 1949

COPY NO. 11

NO. OF PAGES

28

THIS REPORT IS AN INFORMATION COPY. NO CONCLUSIVE ACTION WILL BE TAKEN THEREON UNTIL SUCH TIME AS APPROVAL LETTER FROM HEADQUARTERS, UNITED STATES AIR FORCES, HAS BEEN RECEIVED AND INCORPORATED THEREIN.

HEADQUARTERS
AIR PROVING GROUND
Eglin Air Force Base, Florida

31 August 1949

PROJECT NO. 24913---5

OPERATIONAL SUITABILITY TEST OF OPEN GUN PORTS FOR F-86 AIRCRAFT

1. Inclosed herewith is Final Report of Air Proving Ground, Eglin Air Force Base, Florida, subject as above.

2. Object: To determine the operational suitability at normal temperatures of the open gun ports for F-86 aircraft as compared to automatic gun muzzle door installations.

3. Description: The open gun ports installed on F-86 type aircraft are conventional grooved blast plates located at the forward end of each caliber .50 gun compartment.

4. Synopsis: It was concluded that open gun ports are more desirable for use on F-86 aircraft than automatic gun muzzle doors. It was also concluded that the type open gun port panels used for the test were satisfactory for service use on F-86 type aircraft. It was recommended that open gun ports be standardized for use on all F-86 type aircraft and that panels be provided as soon as possible to replace the present panel housing the automatic gun muzzle doors used on current F-86 aircraft.

5. Inclosures:

1 - Copy of Directive
2 - Final Report

W. E. KEPNER
Major General, USAF
Commanding

DSA 48

EDA183
RR JEJRG

FM JEDC 22J/CG AMC WRIGHT-PATTERSON AFB OHIO 042210Z
TO CG AIR PROVING GROUND EGLIN AF BASE FLORIDA
AF GRNC

MCPPXA42-5-8 CONTRACT AC-16013 F-86A AIRPLANES INSTALLATION OF FLUSH GUN PORT PANELS TO PROVIDE FOR AN ALTERNATE INSTALLATION TO THE GUN PORT DOOR ARRANGEMENT ON THE F-86A AIRPLANE IN CASE OF CONTINUED FAILURES NORTH AMERICAN AVIATION HAS BEEN REQUESTED TO FURNISH TO YOUR COMMAND ONE SET OF SIDE PANELS WITH FLUSH OPEN PORTS PD IT IS SUGGESTED THAT THESE PANELS BE PLACED ON ONE OF THE F-86A AIRPLANES UNDERGOING GUNFIRE TESTS AND FIRED A FULL 10,000 ROUND PER GUN COMPLEMENT IN AN EFFORT TO HAVE THEM APPROVED FOR INSTALLATION AT A LATER DATE SHOULD THIS PROVE NECESSARY SIGNED PROCUREMENT DIVISION

CFN MCPPXA42-5-8 AC-16013 F-86A F-86A F-86A 10,000
04/2210Z

C O P Y

HEADQUARTERS
AIR PROVING GROUND
Eglin Air Force Base, Florida

FINAL REPORT

ON

OPERATIONAL SUITABILITY TEST OF OPEN GUN PORTS FOR F-86 AIRCRAFT

PROJECT NO. 24913---5

INDEX

1. OBJECT:

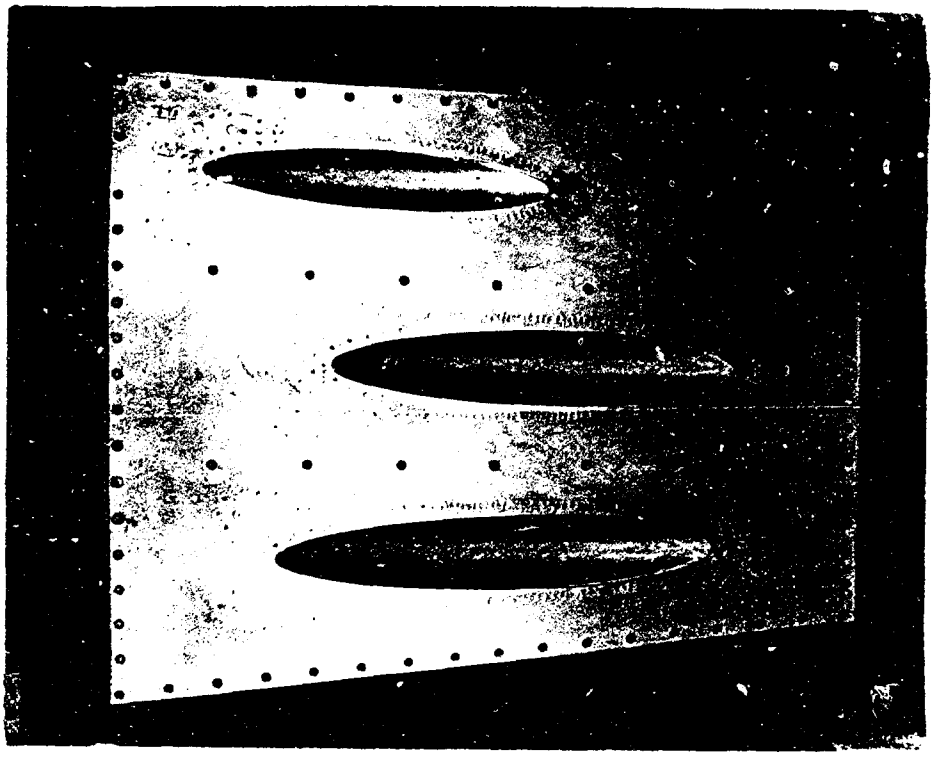
To determine the operational suitability at normal temperatures of the open gun ports for F-86 aircraft as compared to automatic gun muzzle door installations.

2. INTRODUCTION:

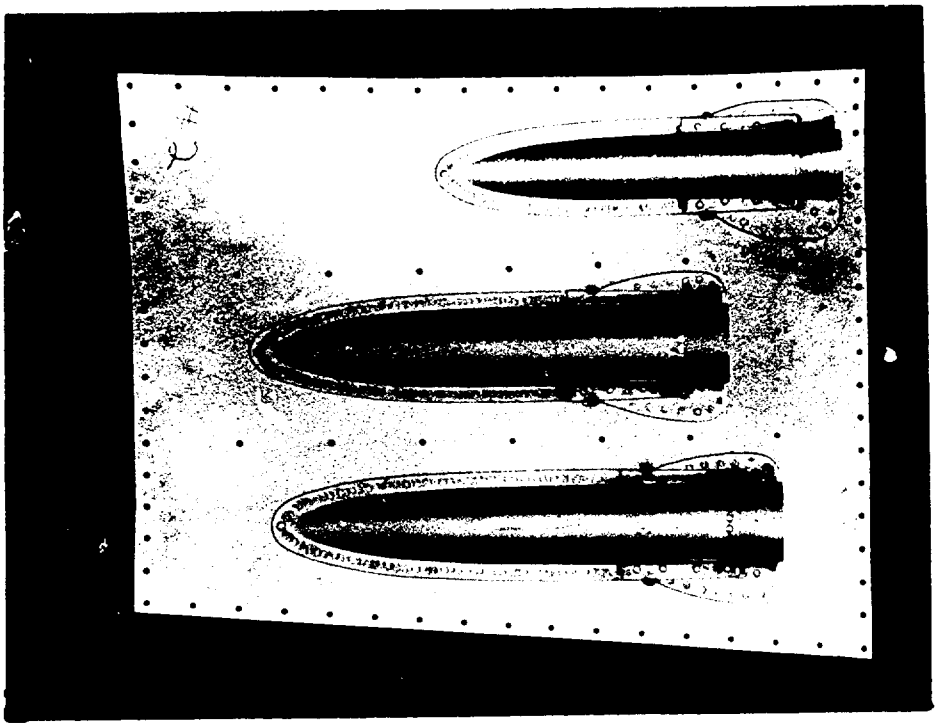
a. General: The gun muzzle doors presently installed on F-86 type aircraft have previously been considered unsatisfactory due to maintenance difficulties and unsafe flying conditions involved during firing, caused by "cook-offs" and occasional loss of gun muzzle doors.

b. Purpose: This test was activated to provide a comparison between the open gun ports and the flush gun muzzle doors which are currently being installed on F-86 aircraft.

c. Description: The open gun ports are conventional grooved blast plates riveted and welded to the two stainless steel panels located forward of each gun compartment (see photographs 1, 2 and 3 below).



PHOTOGRAPH 1: Outside view of open gun port panel



PHOTOGRAPH 2: Inside view of open gun port panel

PHOTOGRAPH 3: Open gun port panel installed on F-86 airplane

d. Conditions of Test: This test was conducted under ambient temperatures encountered between 0 and 40,000 feet altitudes. Cold soaking of installation before firing at extreme altitudes was not extended over five minutes duration due to the limited amount of fuel available.

3. CONCLUSIONS:

a. Open gun ports are more desirable for use on F-86 aircraft than the presently used automatic gun muzzle door installation.

b. The open gun port panels as tested are satisfactory for service use on F-86 aircraft.

4. RECOMMENDATIONS:

a. Open gun ports be standardized for use on all F-86 type aircraft.

b. Open gun port panels be provided as soon as possible to replace the present panel housing the automatic gun muzzle doors.

5. DISCUSSION:

a. General:

(1) A total of 60,116 rounds of ammunition was fired through the open gun port installation used for this test. Forty separate firing missions were utilized during the overall testing. One was a ground firing mission to determine trouble-free operation of the armament system, six were air-to-ground firing missions, two were air-to-air firing on towed targets, and 31 were air free firing missions at various altitudes up to and including 40,000 feet, one of which was at night to determine the blinding effect of muzzle flash on the pilot.

(2) All firing was accomplished in approximately 40- to 50-round bursts with cooling intervals from 2 to 3 minutes between bursts. Indicated airspeeds ranged from 180 to 560 mph.

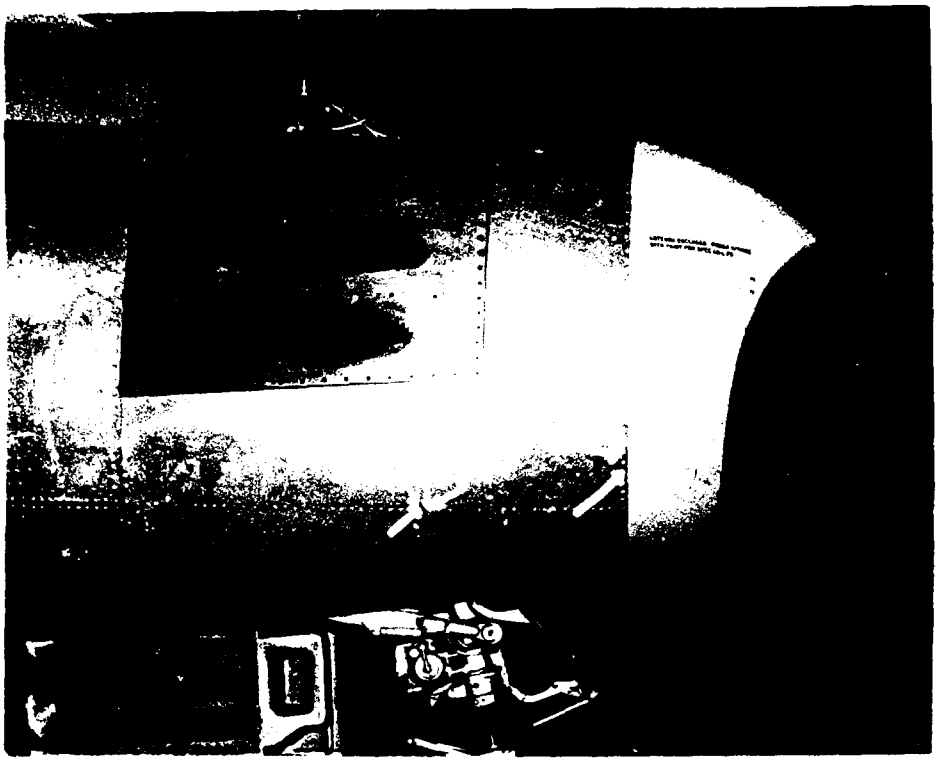
b. Summary of Results:

(1) Pilots flying the F-86 with open gun ports, who had previously flown F-86 aircraft with flush gun muzzle door ports, reported that there was no noticeable difference in handling characteristics of the airplane due to the open gun ports.

(2) No maintenance was required on the open gun ports other than cleaning off burned powder and tightening of the filister head screws which vibrated loose during each firing mission. Considerable maintenance was required on the flush gun muzzle door installations used in Project No. 6484----5, "Operational Suitability Test of the F-86A Airplane." This maintenance was mainly due to occasional loss of gun muzzle doors, adjustment required for proper operation of door actuator motors and the time required to properly clean the gun muzzle doors and their accessory equipment. It was also noted that the filister head screws, which held the gun muzzle door panel to the airplane, had to be tightened after each firing mission.

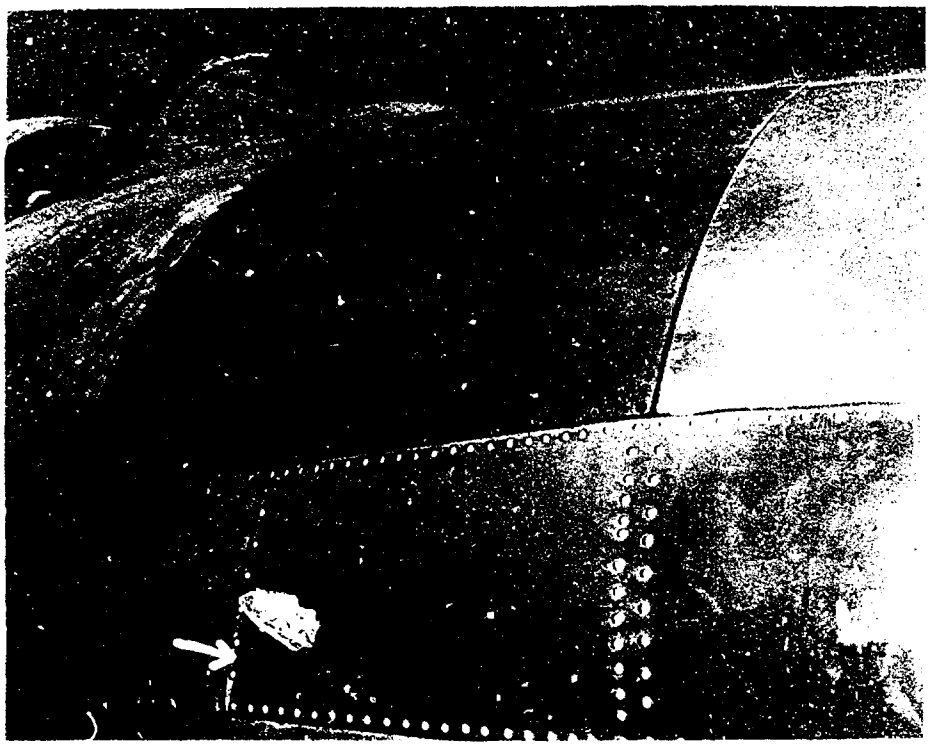
(3) The time required to install both open gun port panels on F-86 aircraft took two men an average time of 40 minutes. Panels could be removed by two men in 30 minutes. Installation and removal of flush gun muzzle port panels took approximately 10 minutes longer for each operation.

(4) The suitability of the structure and materials of the open gun port panels was adequate with the exception of the filister head screws which held the panel to the airplane fuselage. Some of these screws were observed to be loose after every firing mission. Damage was encountered, however, to the skin section just below the open gun port panel on the right side of the airplane after a total of only 7,153 rounds had been fired through the installation. The arrows on Photograph 4 below, point to places where the .030 thickness skin was cracked.



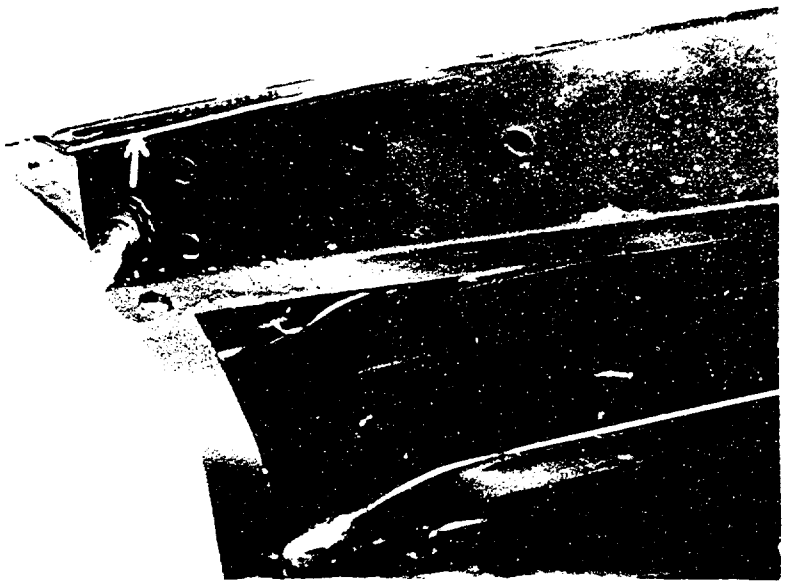
PHOTOGRAPH 4

It is believed that the cracks shown above were a result of gun vibration during high speed firing missions. This discrepancy was remedied by having a strip of .030 thickness skin riveted on top of the cracked portion (see Photograph 5 below).



PHOTOGRAPH 5

It was also noted that the gunsight and radar access compartment cover, shown in Photograph 6 below, revealed a large inside crack after 44,900 rounds had been fired through the installation. This crack was welded together but would not hold for any sufficient length of time.



PHOTOGRAPH 6: Gunsight and radar access compartment cover

(5) There were 82 "cook-offs" recorded during the overall testing of the open gun port panels. This large number of "cook-offs" was in part due to the short cooling interval (from 2 to 3 minutes) between average burst lengths from 40 to 50 rounds. Mission reports indicate that more "cook-offs" occurred when using two-second bursts with three minute cooling intervals than when using 2-1/2-second bursts with a cooling interval of two minutes. However, the cooling interval in both cases was considered too short for proper cooling of guns in the F-86 type aircraft. It is believed that the F-86 does not have sufficient air circulation for gun cooling when using either open or closed gun ports. No record was kept on the number of "cook-offs" that occurred in Project No. 6484——5, where gun muzzle doors were used; however, pilots that flew gunnery missions on that project reported that "cook-offs" were excessive.

(6) The night blindness test mission revealed that the pilot was blinded approximately 3-1/2 seconds after each firing burst when using the open gun ports. No night blindness test was made when using closed gun ports.

6. INCLOSURES:

1 - Test Historical Data
2 - Gun History Records Analysis

PROJECT NO. 24913---5

Prepared by: Junius G. McDonald
JUNIUS G. MCDONALD
1st Lt, USAF
Project Officer

Concurred in: Raymond E. Evans
RAYMOND E. EVANS
Captain, USAF
Test Officer

Approved by: for Charles F. Egan Major USAF
LINUS F. UPSON, JR.
Major, USAF
Acting Chief, Weapons Projects Branch

Approved by: for C H Ham
JAMES T. STEWART
Lt Colonel, USAF
Chief, Proof Test Division

Approved by: for Guy H Rockey
K. K. COMPTON
Colonel, USAF
Deputy for Operations

W. E. KEPNER
Major General, USAF
Commanding

TEST HISTORICAL DATA

APG PROJECT NO. 24913---5

1. AUTHORITY: Teletype from AMC (MCPPXA42-5-8) 4 April 1949
2. ACTIVATION DATE: 6 June 1949
3. EQUIPMENT RECEIVED: 4 June 1949
4. SUSPENSIONS: None
5. COMPLETION: 19 August 1949 (Physical Testing)
6. FLYING HOURS: 29:40
7. GROUND HOURS: 200
8. CLIMATIC CONDITIONS: Temperate
9. RELATED PROJECTS: APG Project No. 6484---5, "Operational Suitability Test of F-86A Airplane"

Inclosure 1

TABLE I

SUMMARY OF THE AIR AND GROUND FIRING OF SIX CAL. .50 M3 MACHINE GUNS MOUNTED IN AN F-86 AIRCRAFT WITH A G-9 SOLENOID

Serial No. of Gun	Location of Gun in A/C	No. Rds. Fired Through Gun	No. Rds. Fired Through Brl	Altitude (Feet)	No. of G's	Malfunction	Remarks
2056162	L #1	540	540	Air-to-Ground	—	E-3	Link chute jam.
		1347	807	Air-to-Ground	—	?-4	Failure to fire; Ground check OK; no reason for not firing.
		4386	465	30,000	—	E-3	Link jam in mouth of link chute.
		4965	1044	30,000	2.5-4.0	G-3	Light struck primer; flat firing pin; changed pin.
		5219	1298	30,000	--	?-1	Light struck primer; changed sear.
		6114	2193	30,000	2.5-4.5	?-3	Failure to chamber round.
		6476	2555	30000-35000	--	?-1	Light struck primer. Changed bolt, firing pin extension, belt feed lever, cocking lever, and receiver cover.
		6696	2770	1,000-5,000	--	?-1	Light struck primer; primer swelled in case due to excess heat.

TABLE I (Cont'd)

Serial No. of Gun	Location of Gun in A/C	No. Rds. Fired Through Gun	No. Rds. Fired Through Brl	Altitude (Feet)	No. of G's	Mal-function	Remarks
		7585	3659	40,000	--	G-1	Light struck primer; brass in firing pin port.
		7806	3880	1,000-10,000	--	G-1	Light struck primer; brass in firing pin port.
		8385	4479	15,000	--	?-1	Light struck primer.
		8787	4881	15,000	--	?-1	Believe to be light struck primer followed by cookoff.
		9105	5299	10,000	--	?-3	Failure to feed; ground check OK. Failure to feed; reason unknown.
2125320	L #2	300	300	Ground	--	?-3	Failure to chamber 49th round.
		376	376	Air-To-Ground	--	M	Failure to extract from chamber; rusty barrel.
		678	302	Air-To-Ground	--	?-1	Light struck primer.
		803	427	Air-To-Ground	--	?-6	Failure to extract from feedway; short round; bolt hit base of round.
		1855	1479	20,000	--	?-3	Failure to chamber round; 12 o'clock stub.
		3614	3238	30,000	--	E-2	Feed chute jam; feed chute came loose at base of feed chute.
		4917	4741	30,000	2.5-4.5	M	Ejector on wrong side of extractor.

RESTRICTED

TABLE I (Cont'd)

Serial No. of Gun	Location of Gun in A/C	No. Rds. Fired Through Gun	No. Rds. Fired Through Brl	Altitude (Feet)	No. of G's	Mal-function	Remarks
		5723	5347	1,000-5,000	--	?-6	Bolt hit base of cartridge; short round.
		6208	5832	1,000-5,000	--	G-1	Light struck primer; brass in firing pin port.
2124032	L #3	672	672	Air-To-Ground	--	E-2	Barrels changed to modified bullet seat. Feed chute jam.
		3227	2555	10,000	--	E-3	Belt feed slide jammed on guide of link chute.
		3230	2558	17,000	--	?-1	Light struck primer; changed bolt switch.
		3783	3111	17,000	--	?-1	Light struck primer.
		4126	3454	30,000	--	?-7	T-slot pulled lip of cartridge; left spent case in chamber; changed barrel and bolt.
		4336	210	30,000	--	?-7	T-slot pulled lip of cartridge; left spent case in chamber.
		6022	1796	40,000	--	?-3	Failure to feed in chamber; short round.

RESTRICTED

TABLE I (Cont'd)

Serial No. of Gun	Location of Gun in A/C	No. Rds. Fired Through Gun	No. Rds. Fired Through Brl	Altitude (Feet)	No. of G's	Mal-function	Remarks
		6315	2089	30,000-35,000	--	G-2	Light struck primer; broken sear. Following parts changed: belt feed lever, firing pin extension, sear cocking lever, bolt switch, extractor, breech lock, and belt feed pawl.
		9005	5779	15,000	--	G-1	Light struck primer; brass in firing pin port.
		10190	6964	10,000	--	E-2	Failure to feed; feed chute came loose at base of chute.
2056447	R #1	558	558	Air-To-Ground	--	E-3	Link chute jam.
		574	16	Air-to-Ground	--	E-1	Solenoid out of time. Barrels changed to modified bullet seat.
		2827	2269	10,000	--	?-1	Light struck primer; cause undetermined.
		3561	3003	17,000	--	A-3	Separated round in feedway.
		4376	815	30,000	--	?-7	T-slot pulled lip of cartridge; left spent case in chamber.

RESTRICTED

TABLE I (Cont'd)

Serial No. of Gun	Location of Gun in A/C	No. Rds. Fired Through Gun	No. Rds. Fired Through Brl	Altitude (Feet)	No. of G's	Mal-function	Remarks
		4989	1428	4,000-10,000	--	?-4	Gun stopped out of battery; no reason for not firing. (Night firing).
		6936	3375	1,000-5,000	--	G-1	Light struck primer; brass in firing pin port.
		7162	3601	40,000	--	?-6	Failure to extract round from belt.
		9828	6267	10,000	--	G-1	Light struck primer; brass in firing pin port.
2123755	R #2	300	300	Ground	--	?-3	Empty chamber - 185 round. Modified belt feed pawl installed.
		372	372	Air-to-Ground	--	M	Failure to extract from chamber; rusty barrel.
		374	2	Air-to-Ground	--	G-4	Barrel changed to modified bullet seat. Failure to feed; extractor failed to secure round while being chambered.
		2243	1871	15,000	--	E-3	Link jam in face of chute.
		3101	2729	17,000	--	?-1	Light struck primer.

RESTRICTED

TABLE I (Cont'd)

Serial No. of Gun	Location of Gun in A/C	No. Rds. Fired Through Gun	No. Rds. Fired Through Brl	Altitude (Feet)	No. of G's	Mal-function	Remarks
		3362	2990	17,000	--	?-3	Bolt ½-inch out of battery; no reason.
		5085	1723	4,000-10,000	--	?-6	Failure to extract from belt (night firing).
		5658	2296	30,000	2.5-4.5	?-1	Light struck primer; changed sear.
		7130	3768	1,000-5,000	--	G-1	Light struck primer; brass in firing pin port.
		7439	4077	1,000-10,000	--	E-2	Feed chute came loose at base of chute.
		9530	7268	10,000	--	G-1	Light struck primer; brass in firing pin port.
2122161	R #3	300	300	Ground	--	?-6	Short round - 225th round; bolt hit round.
		638	638	Air-to-Ground	--	?-6	Failure to extract from feedway.
		963	325	Air-to-Ground	--	G-1	Failure to fire caused by primer blow back.
		1508	870	30,000	--	?-1	Light struck primer.
		1680	1042	1,000	--	?-1	Light struck primer; Changed sear, firing pin and extractor.

RESTRICTED

TABLE I (CONT'D)

Serial No. of Gun	Location of Gun in A/C	No. Rds. Fired Through Gun	No. Rds. Fired Through Brl	Altitude (Feet)	No. of G's	Mal-function	Remarks
		1699	1061	1,000	—	E-1	Solenoid out of time; replaced.
		3342	2704	17,000	—	G-3	Light struck primer; flat firing pin; firing pin and barrel changed.
		6135	2793	30,000-35,000	—	A-1	Failure to extract from belt; short round; changed firing pin extension, belt feed slide pawl, cocking lever, and receiver cover.
		6963	3621	1,000-5,000	--	G-1	Light struck primer; brass in firing pin ports.
		7852	4510	1,000-10,000	--	?-1	Light struck primer followed by a cook-off. Ground check OK.
		9955	6613	10,000	--	G-2	Failure to fire; broken firing pin.

NOTE: All six guns were manufactured by High Standard.

TABLE II

SUMMARY OF ROUNDS LOADED AND FIRED ON THE GROUND, AIR-TO-GROUND AND FROM 1,000 TO 40,000 FEET ALTITUDE, SHOWING NUMBER OF MALFUNCTIONS FOR EACH CONDITION: ALSO PERCENTAGE OF ROUNDS FIRED FOR EACH CONDITION.

No. Missions	1	4	2	6	4
Altitude	Ground	Minimum	1,000	10,000	15,000
No. G's	None	None Given	None Given	None Given	None Given
No. Malfunctions	3	12	2	7	4
No. Rds. Loaded	1800	7200	3600	10,800	7200
No. Rds. Fired	1800	4887	3191	10,102	6140
% Fired	100%	67.9%	88.7%	93.5%	85.3%

No. Missions	3	1	2	6	2
Altitude	17,000	20,000	30,000	30,000	40,000
No. G's	None Given	None Given	2.5 to 4.5	None Given	None Given
No. Malfunctions	6	1	4	7	3
No. Rds. Loaded	5400	1800	3600	10,800	3600
No. Rds. Fired	4765	1652	3250	9,921	3301
% Fired	88.2%	91.8%	90.3%	91.9%	91.7%

					Demonstration
No. Missions	1	3	2	1	2
Altitude	1000-4000	1000-5000	1000-10,000	30,000-35,000	Minimum
No. G's	None Given	None Given	None Given	None Given	None Given
No. Malfunctions	2	6	3	3	0
No. Rds. Loaded	1800	5400	3600	1800	450
No. Rds. Fired	1436	4658	3219	1348	446
% Fired	79.8%	86.3%	89.4%	74.9%	99.1%

RESTRICTED

TABLE III

RELATIONSHIP BETWEEN LOCATION OF CAL. .50 M3 MACHINE GUN MOUNTED IN AN F-86A AND TYPE OF STOPPAGE

Malfunction	L#1	L#2	L#3	R#1	R#2	R#3
(A) Ammunition						
(A-1) Short round						1
(A-3) Defective or bent round				1		
(G) Gun						
(G-1) Light struck primer	2	1	1	2	2	2
(G-2) Broken parts			1			1
(G-3) Worn or bent parts	1					1
(G-4) Improper functioning of parts					1	
(M) Maintenance Personnel		2			1	
(E) Related Equipment						
(E-1) Firing solenoid				1		1
(E-2) Feed chutes		1	2		1	
(E-3) Link chutes	2		1	1	1	
(?) Responsibility Undetermined						
(?-1) Light struck primer	5	1	2	1	2	3
(?-3) Failure to feed into chamber	2	2	1		2	
(?-4) Failure to fire	1			1		
(?-6) Failure to extract round from belt		2		1	1	2
(?-7) Failure to extract round from chamber			2	1		

TABLE IV

CAUSES FOR THE SIXTY-THREE MALFUNCTIONS
OF SIX CAL. .50 M3 MACHINE GUNS MOUNTED IN AN F-86A AIRCRAFT

Stoppages		Causes
	I (A)	Ammunition
1		(A-1) Short round
1		(A-3) Defective or bent round
	II (G)	Gun
10		(G-1) Light struck primer
2		(G-2) Broken parts
2		(G-3) Worn or bent parts
1		(G-4) Improper functioning of parts
3	III (M)	Maintenance Personnel
	IV (E)	Related Equipment
2		(E-1) Firing solenoid
4		(E-2) Feed chutes
5		(E-3) Link chutes
	V (?)	Responsibility Undetermined
14		(?-1) Light struck primer
7		(?-3) Failure to feed into chamber
2		(?-4) Failure to fire
6		(?-6) Failure to extract round from belt
3		(?-7) Failure to extract round from chamber
63	Total	

TABLE V

SUMMARY OF ROUNDS LOADED AND FIRED
FOR EACH OF SIX CAL. .50 M3 MACHINE GUNS MOUNTED IN AN F-86A

	Gun Number					
	L #1 2056162	L #2 2125320	L #3 2124032	R #1 2056447	R #2 2123755	R #3 2122161
Rounds Loaded	11,475	11,475	11,475	11,475	11,475	11,475
Rounds Fired	10,005	9,508	10,390	10,128	10,130	9,955
% Fired	87.2%	82.9%	90.5%	88.3%	88.3%	86.8%

HEADQUARTERS
AIR PROVING GROUND
Eglin Air Force Base, Florida

PROJECT DISTRIBUTION LIST

PROJECT NO. 24913---5

OPERATIONAL SUITABILITY TEST OF OPEN GUN PORTS FOR F-86 AIRCRAFT

	Quantity
The Air Adjutant General, USAF, Washington 25, D. C. Attn: Air Force Document Reference and Research Br.	2
Dir of Intelligence, Hqs, USAF, Washington 25, D. C.	1
Research & Development Board, Washington 25, D. C. Attn: Air Force Secretary	3
Director of Training and Requirements, Attn: Requirements Division, Hqs, USAF, Washington 25, D. C.	10
Office of Chief of Ordnance, Washington 25, D. C. Attn: ORDTX-AR	2
Dir of Program Standards & Cost Control, Comptroller, Hqs USAF, Washington 25, D. C. (AFAPA-3C)	1
Office of Operations Analysis, DCS/O, Hqs, USAF, Washington 25, D. C. (AFOOA)	1
Plans, Programs & Policy Division, DCS/M (AFMPP), Hqs USAF, Washington 25, D. C.	2
CG, Caribbean Air Command, Albrook AF Base, Canal Zone, Attn: DCS/M	3
CG, Newfoundland Base Command, APO 862, c/o PM, New York, Attn: A-3	3
CG, AMC, Wright-Patterson AF Base, Dayton, Ohio, Attn: MCREOC (Mr. R. E. Teter)	10
CG, AMC, Wright-Patterson AF Base, Dayton, Ohio Attn: MCPPXA-42	1
CG, AMC, Wright-Patterson AF Base, Dayton, Ohio Attn: APG Liaison Officer	1
CG, AMC, Wright-Patterson AF Base, Dayton, Ohio Attn: CADO	1
CG, Strategic Air Command, Offutt AF Base, Omaha, Neb.	2
CG, Tactical Air Command, Langley AF Base, Va.	2
CG, Continental Air Command, Mitchel AF Base, N. Y.	1
CG, Air Defense Command, Mitchel AF Base, N. Y.	1
CG, Alaskan Air Command, APO 942, c/o PM Seattle, Wash., Attn: Maintenance Division, DCS/M	3
CG, Aberdeen Proving Ground, Md., Attn: Tech. Info. Sec.	1
Hq, Aberdeen Proving Ground, Md., Attn: AMC Engineering Field Office	1

	Quantity
Ballistic Research Lab., Aberdeen Proving Ground, Md., Attn: Dr. T. E. Sterne	1
14th Air Force Hqs, Orlando, Fla., Attn: Armament Officer, Captain Albert I. Fisher	1
CG, 8th Air Force, Carswell AF Base, Ft. Worth, Tex.	1
CG, USAF in Europe, APO 633, c/o PM, N. Y.	2
CG, 3415th Technical Training Wing, Lowry AF Base, Denver, Colo., Attn: Wing Operations Division	2
CG, 307th Bombardment Wing Medium, MacDill AF Base, Tampa 8, Fla., Attn: Wing Air Inspector	1
Wing Commander, 51st Fighter Wing, APO 239, Unit 2, c/o PM San Francisco	2
CO, 3525th Pilot Training Wing (Adv SE), Williams AF Base, Chandler, Ariz., Attn: Training Research and Development Dept.	2
Hq & Hq 36th Fighter Wing, PAFB, APO 208, c/o PM. N. Y., Attn: Armament Ordnance Officer, Maj J P Lappin	1
CG, 5001st Wing, APO 731, c/o PM Seattle Wash.	2
Air University Library, Maxwell AF Base, Alabama	5
CG, Air Tactical School, Tyndall AF Base, Fla.	1
CG, USAF Field Office for Atomic Energy, Kirtland AF Base, N.M., Attn: Library Officer	1
CO, Las Vegas AF Base, Las Vegas, Nev.	2
CG, Flying Training Division, ATRC, Randolph AF Base, Texas, Attn: Training Development	1
CO, USAF Aircraft Gunnery School, Las Vegas AF Base, Nev.	1
CG, 311th Air Division, Topeka AF Base, Topeka, Kansas	4
CO, 3499th Mobile Training Group, Chanute AF Base, Ill.	1
CG, Technical Division, ATRC, Scott AF Base, Ill.	1
CO, 20th Fighter Group, Shaw AF Base, So. Carolina	3
Wing Ordnance Officer, Howard AF Base, Canal Zone, Attn: Captain J. R. Langley	2
CO, Walker AF Base, N. M., Attn: Armament Officer	1
CG, Command & General Staff College, Ft. Leavenworth, Kansas, Attn: Chief, Air Force Section	1
M.I.T., Cambridge 39, Mass., Attn: Prof. J. R. Markham, Dir. Supersonic Lab. (Room 80-209)	1
M.I.T. Instrument Lab., Cambridge 39, Mass., Hood Bldg., Attn: Miss Mead	1
Rand Corporation, 1500 Fourth St., Santa Monica, Cal., Attn: Philip D. Doersam	1
Chief, Flying Safety Division, Office of the Air Inspector, c/o Inspector General, USAF, First Region, Langley AF Base, Va.	1
Deputy/Operations File, AHG, Eglin AF Base, Fla.	1
Weapons Projects Branch, PTD, APG, Eglin AF Base, Fla.	1
Air Armament Officer, APG, Eglin AF Base, Fla.	1

	Quantity
CO, U.S. Naval Proving Ground, Dahlgren, Va.	1
MCATS, Attn. Major H. R. Jordan, USMC, Marine Corps Schools, Quantico, Va.	1
CO, VMF 311, Marine Corps Air Station, El Toro (Santa Ana) Cal.	1
Cdr. U.S. Naval Air Test Center, Patuxent River, Md., Attn: Armament Test	1
Cdr. U.S. Naval Ordnance Test Center, Attn: Tech. Lib. Sec., Inyokern, Cal., P.O. China Lake, Cal.	1
CO, U.S. Naval Air Station (Aero. Pub. Lib.), Patuxent River, Md.	1
Cdr. Fleet Air West Coast, U.S. Pacific Fleet Air Force, U.S. Naval Air Station, San Diego, Cal.	1
C.O., U.S. Naval Ordnance Plant, Indianopolis 6, Ind.	1
Chief of Naval Operations (Op-551) Room 2910, Navy Dept., Washington 25, D. C.	1
Cdr. U.S. Naval Ordnance Lab., White Oak, Silver Springs 19, Md.	1
COMOPDEVFOR, USS ADIRONDACK, (E-AGC-15) Flagship U.S. Naval Base, Norfolk 11, Va.	1
Commandant of the Marine Corps, Hqs USMC, Washington 25, D. C.	1
Chief Bureau of Aeronautics (Aer-TD-41) Navy Dept., Washington 25, D. C.	2
Chief of the Bureau of Ordnance (Re.8) Navy Dept., Washington 25, D. C.	2
Naval Liaison Officer, APG, Eglin AF Base, Fla.	1

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AIR FORCE BASE OHIO

FEB 19 2002

MEMORANDUM FOR DTIC/OCQ (ZENA ROGERS)
8725 JOHN J. KINGMAN ROAD, SUITE 0944
FORT BELVOIR VA 22060-6218

FROM: AFMC CSO/SCOC
4225 Logistics Avenue, Room S132
Wright-Patterson AFB OH 45433-5714

SUBJECT: Technical Reports Cleared for Public Release

References: (a) HQ AFMC/PAX Memo, 26 Nov 01, Security and Policy Review, AFMC 01-242 (Atch 1)

(b) HQ AFMC/PAX Memo, 19 Dec 01, Security and Policy Review, AFMC 01-275 (Atch 2)

(c) HQ AFMC/PAX Memo, 17 Jan 02, Security and Policy Review, AFMC 02-005 (Atch 3)

1. Technical reports submitted in the attached references listed above are cleared for public release in accordance with AFI 35-101, 26 Jul 01, *Public Affairs Policies and Procedures*, Chapter 15 (Cases AFMC 01-242, AFMC 01-275, & AFMC 02-005).

2. Please direct further questions to Lezora U. Nobles, AFMC CSO/SCOC, DSN 787-8583.

Lezora U. Nobles

LEZORA U. NOBLES
AFMC STINFO Assistant
Directorate of Communications and Information

Attachments:
1. HQ AFMC/PAX Memo, 26 Nov 01
2. HQ AFMC/PAX Memo, 19 Dec 01
3. HQ AFMC/PAX Memo, 17 Jan 02

cc:
HQ AFMC/HO (Dr. William Elliott)

DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AIR FORCE BASE OHIO

NOV 26 2001

MEMORANDUM FOR HQ AFMC/HO

FROM: HQ AFMC/PAX

SUBJECT: Security and Policy Review, AFMC 01-242

1. The following material has been reviewed for security and policy IAW AFI 35-101, Chapter 15. It is cleared for public release:

   a. "Investigation of A-4 Sight in F-86E Airplane, 18 July 1952, DTIC No. AD-473 192

   b. Operational Suitability Test of Open Gun Ports for F-86 Aircraft, 31 August 1949, DTIC No. AD-B971 411

   c. Letter Report on Relative Aerial Combat of the F-84E Versus the F086A Capability, 30 January 1951, DTIC No. AD-B971 840.

2. Two reports require clearance from other organizations. Hypoxia and Undetermined Jet Accidents," will be reviewed by 311th Human Systems Wing, and "RCAF Ejection Experience," will be forward to Air Staff for coordination with RCAF.

3. If you have any questions, please call me at 77828. Thanks.

JAMES A. MORROW
Security and Policy Review
Office of Public Affairs

Attachment:
Your Ltr 26 November 2001

26 November 2001

MEMORANDUM FOR: HQ AFMC/PAX
Attn: Jim Morrow

FROM: HQ AFMC/HO

SUBJECT: Releasability Reviews

1. Please conduct public releasability reviews for the following attached Defense Technical Information Center (DTIC) reports:

   a. *Investigation of A-4 Sight in F-86E Airplane*, 18 July 1952; DTIC No. AD- 473 192.

   b. *Operational Suitability Test of Open Gun Ports for F-86 Aircraft*, 31 August 1949; DTIC No. AD-B971 411.

Cleared AFMC 01-259

   c. *Hypoxia and Undetermined Jet Accidents*, 19 October 1956; DTIC No. AD-115 661.

   d. *Letter Report On Relative Aerial Combat Of The F-84E Versus The F-86A Capability*, 30 January 1951; DTIC No. AD-B971 840.

Cleared AFMC 01-260

   e. *RCAF Ejection Experience, 1952-1961*, 1965; DTIC No. AD-465 171.

2. These attachments have been requested by Dr. Kenneth P. Werrell, a private researcher.

3. The AFMC/HO point of contact for these reviews is Dr. William Elliott, who may be reached at extension 77476.

JOHN D. WEBER
Command Historian

5 Attachments:
a. DTIC No. AD- 473 192
b. DTIC No. AD-B971 411
c. DTIC No. AD- 115 661
d. DTIC No. AD-B971 840
e. DTIC No. AD- 465 171